PolarPlus±

User's manual

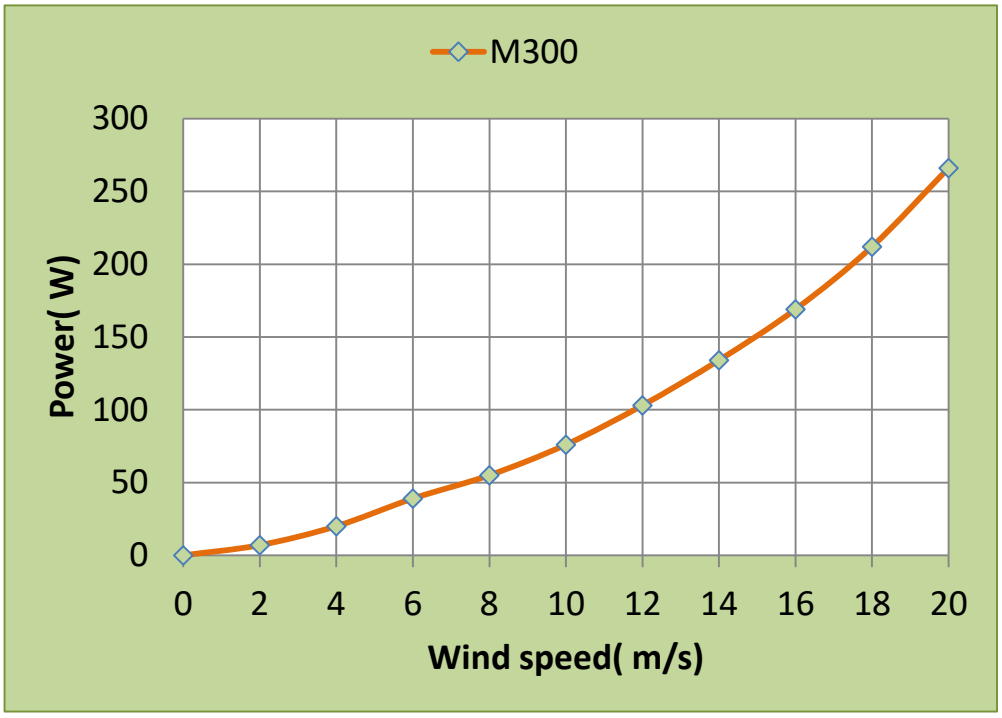
Caution:

1. **Thank you for purchasing the PolarPlus Wind generator. Please refer to the manual before installation;**
2. **The installation should be done by the experienced technicians. Please refer to the manual strictly;**
3. **Do not open the generator or controller without instructions while doing the maintenance.**
4. **Please install the system under no-wind weather.**
5. **The series are street lighting wind generators and do not recommend for family power generation.**

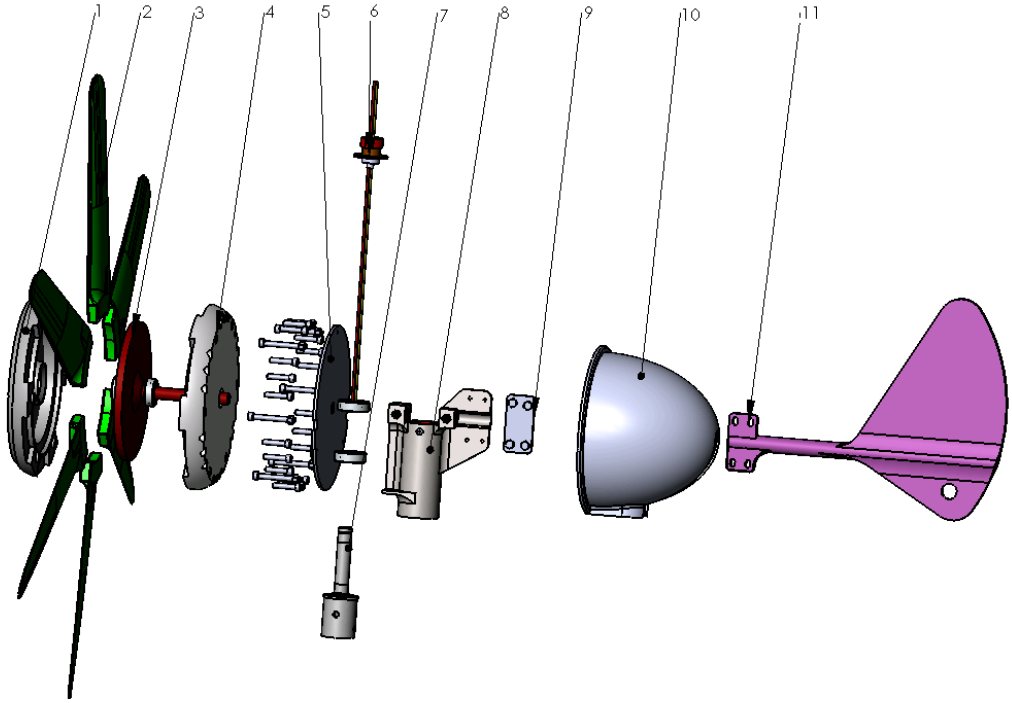
1. Technical Parameter

Model	P12M300 / P24M300
Rated Power(W)	90
Rated Voltage（DCV）	12 / 24
Start-up wind speed （M/S）	1.0
Survival wind speed（M/S）	35
Generator type	PMG
Rotor diameter（M）	0.82
Blade No.（pcs）	6
Blade material	Reinforced fiber glass
Nacelle material	Plastic
Pre-drilled shaft diameter (mm)	41,5
Controller	Built-in
Protection mode	Short circuit
Designed lifetime（year）	15-20
Net weight (kg)	11,1
Packing form	Carton
Protection grade	IP65

2. Power Curve



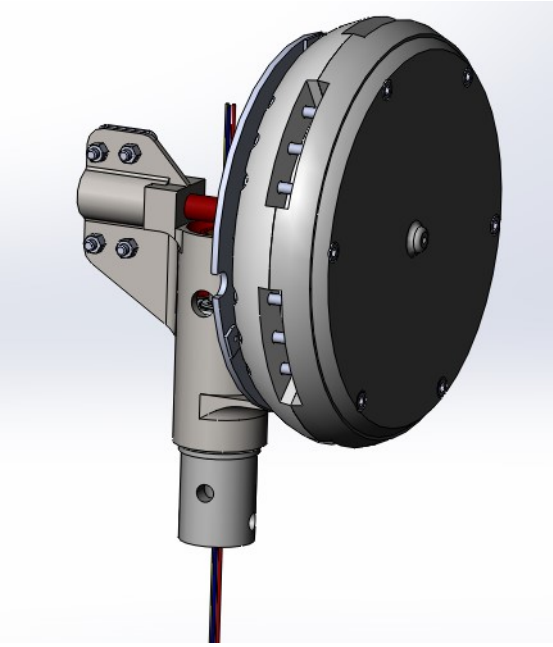
3. Structure



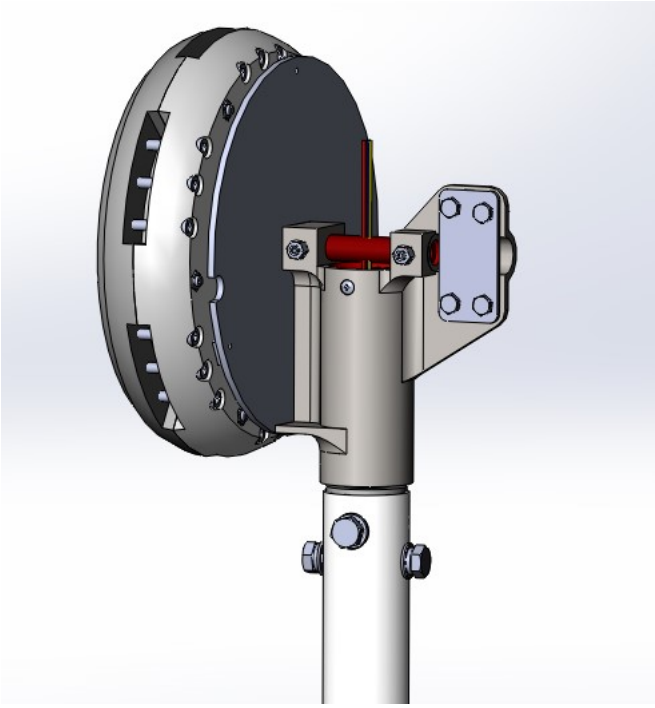
No.	Description	No.	Description
1	Front cover	7	Gyro support
2	Blades	8	Gyro
3	Stator	9	Pressing plate
4	Back cover	10	Back nose cone
5	Clamp	11	Tail vane
6	Slip ring		

4. Installation

- Connect the cables with the terminal from generator. Please pay attention to the positive and negative. The cable will be elicited from the tower.

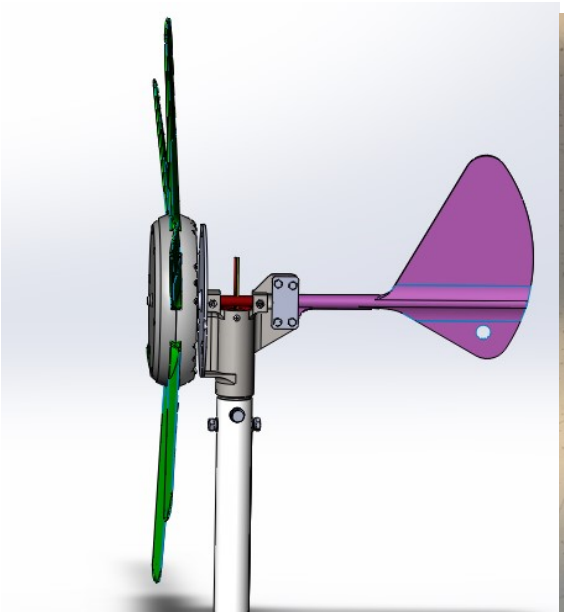


- Connect the small pole and tower with 4 pcs of nuts (M 10*16).



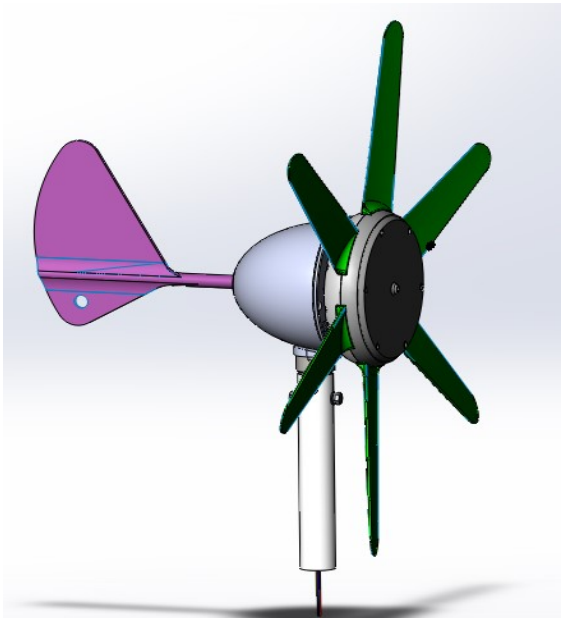
- Install the blades to the generator with 18 pcs of bolts (M6*28).


- Fasten the tail rod, rod plate and gyrator with 4 pcs of screws (M6*30).



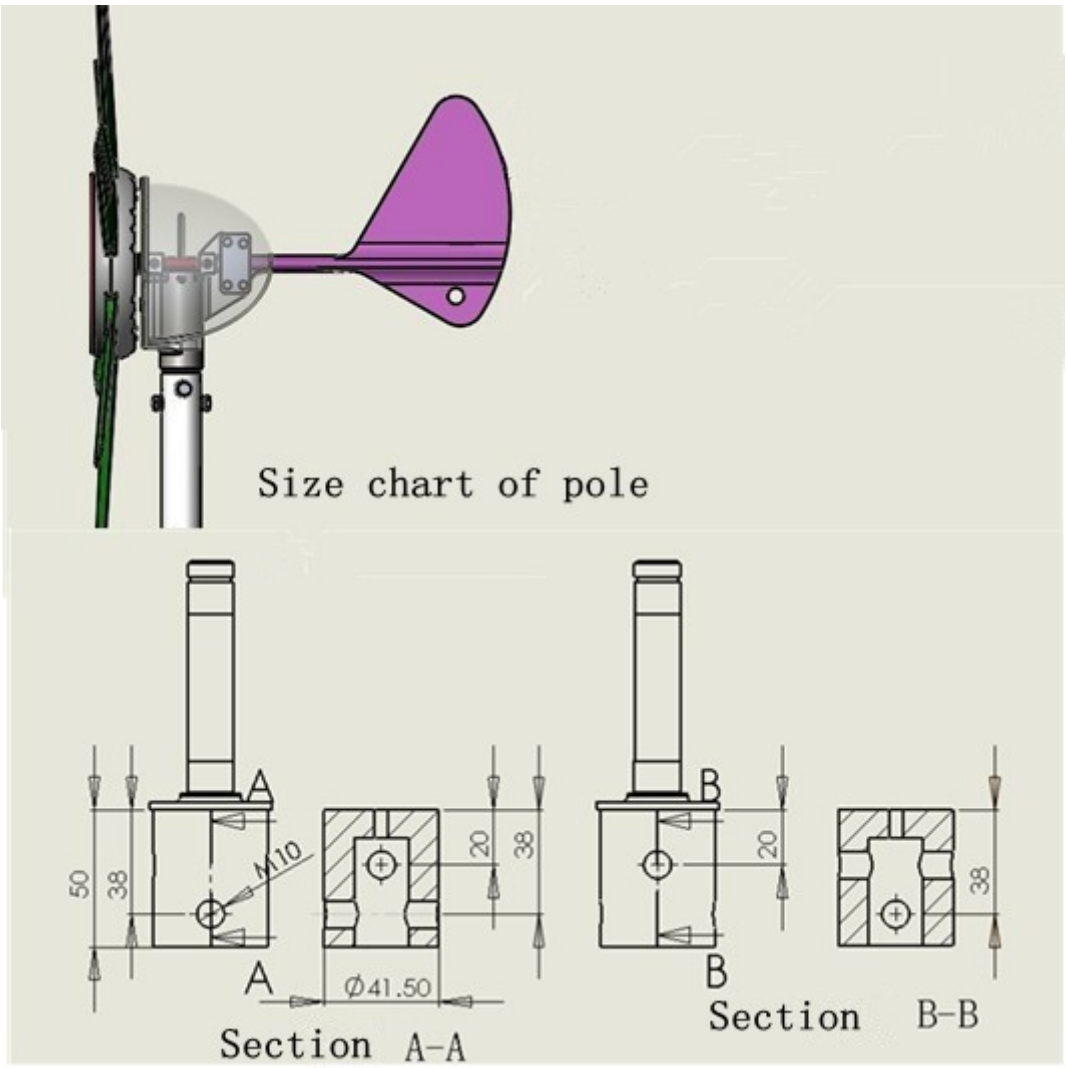

- Fasten the gyrator front cover to the back cover via 3 pcs of bolts (M5*10).

- Connect the cable elicited from generator to the battery. (Note: red for positive and black for negative)



3. Special note:

Connection diagram between wind generator and pole



1. Connect small pole and pipe (48*2.5mm diameter).
2. Drill 2 pcs of symmetrical screw holes (12mm diameter) above a diatance of 20mm at the upper end of pipe.
3. Clockwise 90° in the hole above the distance of 20mm, and drill 2 pcs of symmetrical screw holes (12mm diameter) above a diatance of 38mm at the upper end of pipe.
4. Fasten the pipe between wind generator and tower with 4 pcs screws (M10).

Note:

The joints between wind generator and pole need a torque of 80nm.

Fix with locking grain rubber in suitable condition.